

AMENDMENTS TO THE SPECIFICATION

On page 20, please replace the paragraph beginning and ending on line 5 with the following amended paragraph:

Figure 6 depicts a structure (SEQ ID NOS:15 and 17) which cannot be amplified using DNAP*Taq*.

On page 20, please replace the paragraph beginning on line 17 and ending on line 18 with the following amended paragraph:

Figure[[s]] 12A shows the substrates (SEQ ID NO:32) and oligonucleotides (SEQ ID NOS:18 and 19) used to test the specific cleavage of substrate DNAs targeted by pilot oligonucleotides.

On page 20, please replace the paragraphs beginning on line 21 and ending on line 26 with the following amended paragraphs:

Figure 13A shows the substrate (SEQ ID NO:161) and oligonucleotide (SEQ ID NO:20) used to test the specific cleavage of a substrate RNA targeted by a pilot oligonucleotide.

Figure 13B shows an autoradiogram of a gel showing the results of a cleavage reaction using the substrate and oligonucleotide shown in Fig. 13A.

Figure 14 is a diagram of vector pTTQ18 comprising SEQ ID NO:162.

Figure 15 is a diagram of vector pET-3c comprising SEQ ID NO:163.

On page 21, please replace the paragraph beginning on line 5 and ending on line 6 with the following amended paragraph:

Figure 19A depicts the substrate molecule (SEQ ID NO:164) used to test the ability of synthesis-deficient DNAPs to cleave short hairpin structures.

On page 21, please replace the paragraphs beginning on line 9 and ending on line 13 with the following amended paragraphs:

Figure 20A shows the A- and T-hairpin molecules (SEQ ID NOS:23-24) used in the trigger/detection assay.

Figure 20B shows the sequence of the alpha primer (SEQ ID NO:25) used in the trigger/detection assay.

Figure 20C shows the structure of the cleaved A- (SEQ ID NO:28) and T-hairpin (SEQ ID NO:27) molecules.

On page 21, please replace the paragraph beginning on line 16 and ending on line 17 with the following amended paragraph:

Figure 21 provides the complete 206-mer duplex sequence (SEQ ID NO:32) employed as a substrate for the 5' nucleases of the present invention (shown within SEQ ID NO:165).

Please renumber Claims pages 396-398 and 400-401 as consecutive pages 306-310.

Please renumber the Abstract page as page 401.

Please substitute the Sequence Listing attached herewith as pages 1-96 for the Sequence Listing filed August 8, 2001, as pages 306-395.